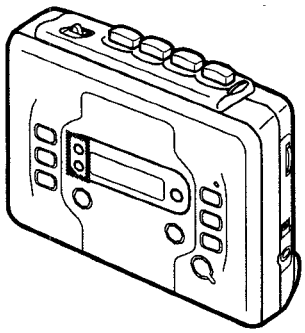
aiwa

aiwa SERVICE

HS-TX486
HS-TX486V
HS-TX586



STEREO RADIO CASSETTE PLAYER

SERVICE MANUAL

- BASIC TAPE MECHANISM: 7ZM-5 P1N
- TYPE: 486: YH,YJ,YL,YU,YK,YZ
  486V: YV 586: YU,YZ,YJ

S/M Code No. 09-982-247-8FP

SPECIFICATIONS

Frequency range:

YU:
AM: 531/530 – 1,602/1,710 kHz (9/10 kHz step)
531 – 1,629 KHz (9 kHz step)
FM1, FM2: 87.5/87.5 – 108/108.1 MHz
(50/200 kHz steps)
76 – 108 MHz (100 kHz step in 76 – 90 MHz,
50 KHz step in 90 – 108 MHz)

YV:
AM: 531/530 – 1,602/1,710 kHz (9/10 kHz step)
FM1: 65/87.5 – 74/108.1 MHz (10/200 kHz steps)
FM2: 87.5/87.5 – 108/108.1 MHz (50/200 kHz steps)

YZ,YK:
AM: 531/530 – 1,602/1,710 kHz (9/10 kHz step)
FM1,FM2: 87.5/87.5 – 108/108.1 MHz
(50/200 kHz steps)

YH,YJ,YL:
AM: 531/530 – 1,602/1,710 kHz (9/10 kHz step)
531 – 1,629 KHz (9 kHz step)
FM: 87.5/87.5 – 108/108.1 MHz (50/200 kHz steps)
76 – 108 MHz (100 kHz step in 76 – 90 MHz,
50 KHz step in 90 – 108 MHz)

Maximum output:
15 mW + 15 mW (EIAJ/32 ohms)
20 mW + 20 mW (EIAJ/16 ohms)

Power source:
Battery DC 3V, R6 (size AA) x 2

YU,YL,YH,YJ:
Domestic AC power (using optional AC adaptor:
AIWA AC-620/302)

YV,YZ,YK:
Domestic AC power (using optional AC adaptor:
AIWA AC–300/302)

Battery life (EIAJ, 1mW output, playback):
Approx. 9 hours using R6P (size AA) manganese batteries
Approx. 22 hours using LR6 (size AA) alkaline batteries

Maximum dimensions (W x H x D):
112.6 x 86.8 x 34.9 mm
($4^1/_2$ x $3^1/_2$ x $1^7/_{16}$ in)

Weight:
Approx. 172 g (6.02 oz) excluding batteries

• Design and specifications are subject to change without notice.

ELECTRICAL MAIN PARTS LIST

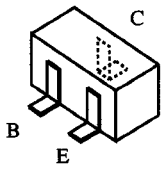
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-545-040		C-IC,MM1376BF
	87-A20-532-040		C-IC,LB1977M
	87-A20-851-040		C-IC,TA2111F
	87-A20-814-010		C-IC,TC9318FB-027
	87-A20-904-080		C-IC,TK11823MTL
TRANSISTOR			
	87-026-261-080		C-TR, RN1404
	87-A30-085-070		C-TR,CSA1362GR
	87-026-268-080		C-TR,RN2411
	89-327-143-080		C-TR,2SC2714
	87-026-581-080		C-TR,RN2405
	89-327-125-080		C-TR,2SC2712GR
DIODE			
	87-A40-360-080		C-DIODE,MA786
	87-A40-478-070		C-VARI-CAP,KV1590TL
	87-A40-479-080		C-VARI-CAP,KV1430TL
	87-020-027-080		C-DIODE,1SS184<YV>
MAIN C.B			
	87-A90-793-010		FLTR,KMFC5148-A COMBINATN
BPF101	87-008-522-010		FLTR GFEB3-C1<YV>
BPF101	87-A90-601-010		FLTR,BPF GFWB7<EXCEPT YV>
C1	87-010-178-080		C-CAP,S 1000P-50 K B
C2	87-010-178-080		C-CAP,S 1000P-50 K B
C3	87-012-156-080		C-CAP,S 220P-50 CH
C4	87-012-156-080		C-CAP,S 220P-50 CH
C5	87-016-436-080		C-CAP,TN 47-4(B2)
C6	87-010-820-040		CAP,E 47-4 (MJ)
C7	87-010-220-080		C-CAP,S 0.018-25 B
C8	87-010-220-080		C-CAP,S 0.018-25 B
C11	87-016-462-080		C-CAP,S 1-16 F
C12	87-016-462-080		C-CAP,S 1-16 F
C14	87-010-180-080		C-CAP,S 1500P-50 K B
C15	87-010-180-080		C-CAP,S 1500P-50 K B
C16	87-010-196-080		C-CAP,S 0.1-25 Z F
C17	87-010-196-080		C-CAP,S 0.1-25 Z F
C18	87-010-503-040		CAP,E 220-4 M 5L<586 ONLY>
C19	87-010-503-040		CAP,E 220-4 M 5L<586 ONLY>
C20	87-010-196-080		C-CAP,S 0.1-25 Z F
C21	87-010-498-040		CAP,E 10-16 M 5L
C24	87-010-822-040		CAP,E 220-4 (MJ)
C25	87-010-196-080		C-CAP,S 0.1-25 Z F
C26	87-010-498-040		CAP,E 10-16 M 5L
C27	87-010-196-080		C-CAP,S 0.1-25 Z F
C28	87-010-503-040		CAP,E 220-4 M 5L
C30	87-016-461-080		C-CAP,S 0.47-16 Z F
C51	87-010-196-080		C-CAP,S 0.1-25 Z F
C52	87-016-526-080		C-CAP,S 0.47-16 K B
C53	87-010-992-080		C-CAP,S 0.047-25 K B
C54	87-010-502-040		CAP,E 100-4 M 5L
C55	87-A10-201-080		C-CAP,S 0.33-16 K B
C56	87-016-669-080		C-CAP,S 0.1-25 K B
C57	87-016-669-080		C-CAP,S 0.1-25 K B
C58	87-016-669-080		C-CAP,S 0.1-25 K B
C59	87-010-196-080		C-CAP,S 0.1-25 Z F
C61	87-016-669-080		C-CAP,S 0.1-25 K B
C101	87-010-196-080		C-CAP,S 0.1-25 Z F
C102	87-010-175-080		C-CAP,S 560P-50 J SL
C103	87-010-194-080		C-CAP,S 0.047-25 Z F
C104	87-010-146-080		C-CAP,S 2P-50 C CH<EXCEPT YV>
C105	87-012-157-080		C-CAP,S 330P-50 CH<YV>
C105	87-010-320-080		C-CAP,S 68P-50 J CH<EXCEPT YV>
C106	87-010-197-080		C-CAP,S 0.01-25 K B
C107	87-016-462-080		C-CAP,S 1-16 F
C109	87-010-147-080		C-CAP,S 3P-50 CH<YV>
C109	87-010-150-080		C-CAP,S 6P-50 CH<EXCEPT YV>
C110	87-010-322-080		C-CAP,S 100P-50 CH<YV>
C110	87-010-318-080		C-CAP,S 47P-50 CH<EXCEPT YV>
C111	87-010-145-080		C-CAP,S 1P-50 CH<EXCEPT YV>
C111	87-010-146-080		C-CAP,S 2P-50 C CH<YV>
C112	87-016-462-080		C-CAP,S 1-16 F
C113	87-010-197-080		C-CAP,S 0.01-25 K B
C114	87-010-151-080		C-CAP,S 7P-50 CH
C115	87-010-154-080		C-CAP,S 10P-50 D CH
C116	87-010-822-040		CAP,E 220-4 (MJ)
C117	87-010-196-080		C-CAP,S 0.1-25 Z F
C118	87-012-157-080		C-CAP,S 330P-50 CH
C119	87-010-196-080		C-CAP,S 0.1-25 Z F
C120	87-010-196-080		C-CAP,S 0.1-25 Z F
C121	87-016-462-080		C-CAP,S 1-16 F
C122	87-010-196-080		C-CAP,S 0.1-25 Z F
C123	87-010-220-080		C-CAP,S 0.018-25 B
C124	87-010-220-080		C-CAP,S 0.018-25 B
C125	87-012-141-080		C-CAP,S 0.22-16 Z F
C126	87-012-141-080		C-CAP,S 0.22-16 Z F
C127	87-010-178-080		C-CAP,S 1000P-50 K B
C128	87-010-178-080		C-CAP,S 1000P-50 K B<YZ,YK>
C128	87-010-322-080		C-CAP,S 100P-50CH <EXCEPT YZ,YK>
C129	87-010-500-040		CAP,E 33-4 M 5L
C130	87-016-462-080		C-CAP,S 1-16 F
C131	87-010-197-080		C-CAP,S 0.01-25 K B
C132	87-010-197-080		C-CAP,S 0.01-25 K B
C133	87-010-197-080		C-CAP,S 0.01-25 K B
C134	87-010-145-080		C-CAP,S 1P-50 CH
C135	87-012-156-080		C-CAP,S 220P-50 CH
C138	87-010-502-040		CAP,E 100-4 M 5L
C140	87-010-197-080		C-CAP,S 0.01-25 K B
C141	87-010-197-080		C-CAP,S 0.01-25 K B
C142	87-010-197-080		C-CAP,S 0.01-25 K B
C143	87-010-322-080		C-CAP,S 100P-50 CH
C145	87-016-461-080		C-CAP,S 0.47-16 Z F
C149	87-010-178-080		C-CAP,S 1000P-50 K B
C501	87-A10-422-080		C-CAP,TN 10-4 A TCF
C502	87-010-196-080		C-CAP,S 0.1-25 Z F<YZ,YK>
C503	87-010-322-080		C-CAP,S 100P-50 CH
CF101	87-A90-710-010		FLTR,AM IF PFS450A3
J1	87-A60-122-010		JACK,DC 3.8
J2	87-A60-438-010		JACK,3.5 BLK ST <486 ONLY>
J2	87-A60-437-010		JACK,3.5 BLK ST 4P<586 ONLY>
L1	87-A50-185-010		COIL,RF CHOKE
L2	87-003-243-080		C-COIL,S 10UH<586 ONLY>
L101	87-HRA-603-010		BAR-ANT,MW
L102	88-HRA-606-010		COIL,FM RF<EXCEPT YV>
L102	88-HRA-608-010		COIL,FM RF V<YV>
L103	88-HRA-607-110		COIL,OSC FM<EXCEPT YV>
L103	88-HRA-609-010		COIL,OSC FM V<YV>
L104	87-003-226-080		MICRO INDUCTOR 100UJ
L105	87-A90-663-010		IFT,MW 5L H6.4
SFR51	87-A90-734-080		C-SFR,33K B RH03AXAN4X
SW1	87-A90-423-010		SW,LEAF
SW2	87-A90-050-010		SW, SL 2-2-2 NS (BLK)
SW3	87-A90-422-010		SW,SL 2-2-2
TH51	87-A90-542-080		C-THMS,NTH5G2M35A472K04TE
VC101	87-011-155-010		TRIMMER,CER 10P
VR1	87-A90-479-010		VR,RTRY 20KAX2
FRONT C.B			
C201	87-010-181-080		C-CAP,S 1800P-50 K B
C202	87-010-181-080		C-CAP,S 1800P-50 K B
C203	87-010-181-080		C-CAP,S 1800P-50 K B
C204	87-010-181-080		C-CAP,S 1800P-50 K B
C205	87-010-198-080		C-CAP,S 0.022-25 K B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C206	87-010-452-080		C-CAP,1-16 Z F
C207	87-010-197-080		C-CAP,0.01-25 K B
C208	87-010-149-080		C-CAP,S 5P-50 CH
C209	87-012-154-080		C-CAP,S 150P-50 J CH<EXCEPT YV>
C209	87-010-319-080		C-CAP,S 56P-50 CH<YV>
C210	87-010-152-080		C-CAP,S 8P-50 CH
C211	87-016-462-080		C-CAP,S 1-16 F
C212	87-016-462-080		C-CAP,S 1-16 F
C213	87-010-196-080		C-CAP,S 0.1-25 Z F
C214	87-016-462-080		C-CAP,S 1-16 F
C215	87-016-462-080		C-CAP,S 1-16 F
C216	87-016-462-080		C-CAP,S 1-16 F
C217	87-010-311-080		C-CAP,S 12-50 J CH
C218	87-010-312-080		C-CAP,S 15P-50 CH
C219	87-012-142-080		C-CAP,S 0.33-16 Z F
C221	87-010-196-080		C-CAP,S 0.1-25 Z F
C222	87-010-196-080		C-CAP,S 0.1-25 Z F
C224	87-010-178-080		C-CAP,S 1000P-50 K B<586 ONLY>
C226	87-010-197-080		C-CAP,S 0.01-25 K B
C233	87-010-178-080		C-CAP,S 1000P-50 K B
C234	87-016-462-080		C-CAP,S 1-16 F
C235	87-010-178-080		C-CAP,S 1000P-50 K B
C401	87-012-142-080		C-CAP,S 0.33-16
C402	87-012-142-080		C-CAP,S 0.33-16
C403	87-016-462-080		C-CAP,S 1-16 F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L201	87-A50-230-080		C-COIL,D-D(CP4LBM)
LCD201	88-HR9-604-010		LCD,HS ASSY(BAND/TU)
R205	87-022-353-080		C-RES,S 6.8K-1/10W F
R206	87-022-363-080		C-RES,S 68K-1/10W F<586 ONLY>
R217	87-022-353-080		C-RES,S 6.8K-1/10W F
R224	87-022-361-080		C-RES,S 47K-1/10W F
SW213	87-036-123-080		CHIP SLIDE SWITCH,1-1-2
TH201	87-A90-547-080		C-THMS,47K (5%)NTH 5G
X201	87-030-431-010		VIB,XTAL 75K(KF-26)
HEAD FLEX C.B			
PH1	87-A90-435-010		HEAD ASSY 7ZM-5
FLEX C.B			
W1	88-HRA-603-010		FF-CABLE, 24P

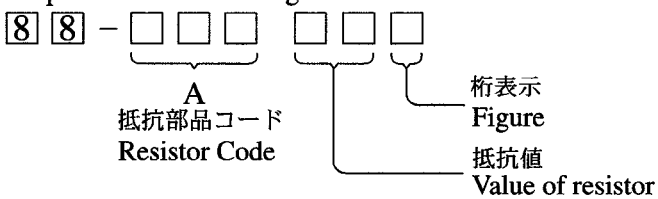
TRANSISTOR ILLUSTRATION



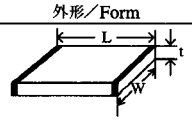
2SA1362	RN1404
2SC2714	RN2411
2SC2712	RN2405
CSA1362	RN1411

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

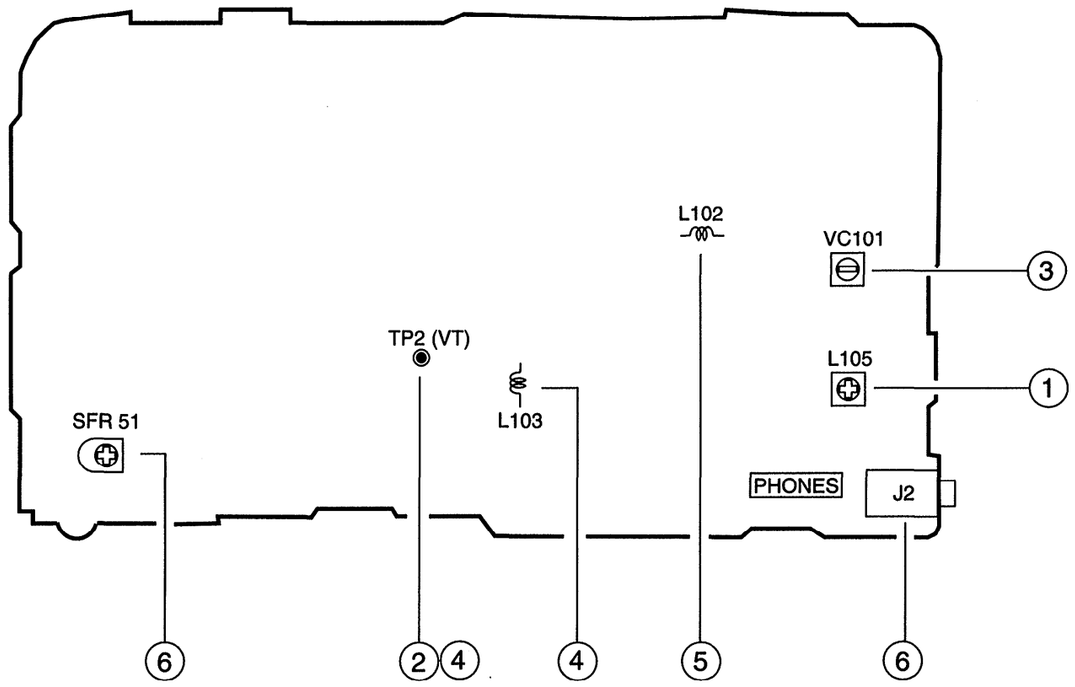


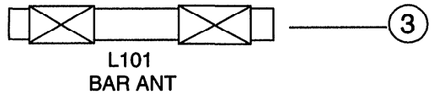
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

ADJUSTMENT

A MAIN C.B





<RADIO SECTION>

1. AM IF Adjustment
   L105 ..... 450kHz

2. AM VT Check
   Settings : • Test point : TP2 (VT)
   Method : Set to AM 530kHz and TP2, check the test point is more than 0.8V. Then set to AM 1710kHz and check the test point is 7 ± 1V.

3. AM Tracking Adjustment
   L101 ..... 630kHz
   VC101 ..... 1440kHz

4. FM VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Adjustment location : L103
   Method : Set to FM 76MHz (using jig) and adjust L103 so that the test point becomes 1.0V ± 0.1V.Then set to FM 108.1MHz and check test point is in 9.0V+1.0V/-2.0V.

5. FM Tracking Adjustment
   L102 ..... 76MHz

<TAPE PLAYER SECTION>

6. Tape Speed Adjustment
   Settings : • Test tape : TTA–100 (TAPE CENTRE)
   • Test point : PHONES JACK (J2)
   • Adjustment location : SFR51
   • Tape/radio : TAPE
   • Tape select : NORM
   • Ear guard (YZ,YK only) : OFF
   • S-BASS : OFF
   • Direction : FWD
   • Volume : NON–CLIP (MAX -10dB DOWN)
   Method : Play back the test tape and adjust for 3015 ± 10Hz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

Sensitivity :		
(IHF, THD 3%)	FM	Less than 22dB [at 65MHz (YV)]
		[at 76MHz (YU,YL)]
		[at 87.5MHz (Except YU,YL,YV)]
		Less than 22dB [at 90MHz (YU,YL)]
		[at 98.1MHz (Except YU,YL)]
		Less than 22dB [at 74MHz (YV)]
		[at 108.0MHz (Except YV)]
(S/N 10dB)	AM	Less than 59dB [at 630kHz]
		Less than 56dB [at 1000kHz (YU,YL only)]
		[at 999kHz (Except YU,YL)]
		Less than 56dB [at 1440kHz]
S/N Ratio :	FM	More than 43dB [at 65MHz (YV)]
		[at 76MHz (YU,YL)]
		[at 87.5MHz (Except YU,YL,YV)]
		More than 43dB [at 90MHz (YU,YL)]
		[at 98.1MHz (Except YU,YL)]
		More than 43dB [at 74MHz (YV)]
		[at 108MHz (Except YV)]
	AM	More than 26dB [at 630kHz]
		More than 28dB [at 1000kHz (YU,YL only)]
		[at 999kHz (Except YU,YL)]
		More than 28dB [at 1440kHz]
Intermediate frequency :	FM	10.7MHz ± 0.1MHz
	AM	450kHz ± 3kHz
FM stereo separation :		More than 16dB [at 90MHz (YU,YL)] [at 98.1MHz (Except YU,YL)]

<TAPE SECTION>

Tape speed :	3015Hz ± 50Hz
Wow & flutter :	Less than 0.50% (RMS)
Take-up torque :	24 ~ 35g-cm (FWD, REV)
F.F torque :	70 ~ 150 g-cm
Rew torque :	70 ~ 150 g-cm
Back tension :	1.5 ~ 4.0g-cm (FWD, REV)
S/N ratio :	More than 43dB (PB, DC)
Distortion :	Less than 3.0% (PB, DC)
Noise level :	Less than 7.0mV (Vol MAX, PB, DC)
Frequency response :	63Hz +1/-5dB ~ 8kHz ± 3dB (NORMAL)
	63Hz +1/-5dB ~ 10kHz +3/-4dB (CrO2, METAL)
Test tape :	TTA– 210
	TTA–320(120μ)/TTA-310(70μ)
	TTA– 602

C HEAD FLEX C.B (1/2)

C HEAD FLEX C.B (2/2)

A MAIN C.B

SW3
REV/FWD
REV ⟷ FWD

SW501
EAR GUARD
OFF ⟷ 1 ⟷ 2

VR1
VOLUME
MIN
↕
MAX

L101
(BAR ANT)

SW351
DOLBY NR
OFF
↕
ON

SW2
FUNCTION
STEREO NORM
↕ ↕
MONO HIGH/METAL

J2
PHONES

SW1
(PLAY SW)

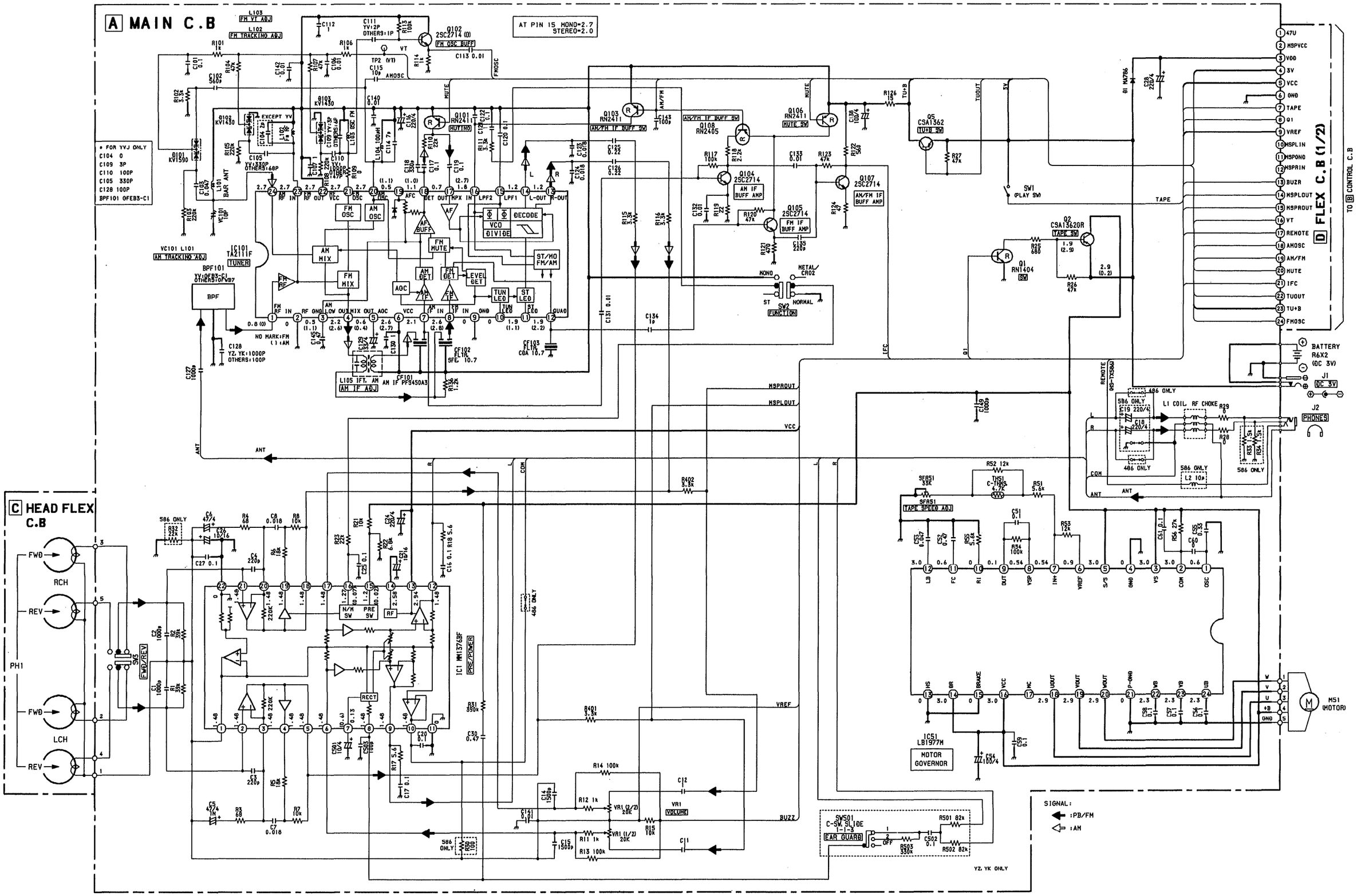
BATTERY
R6X2 (DC3V)

M1
(MOTOR)

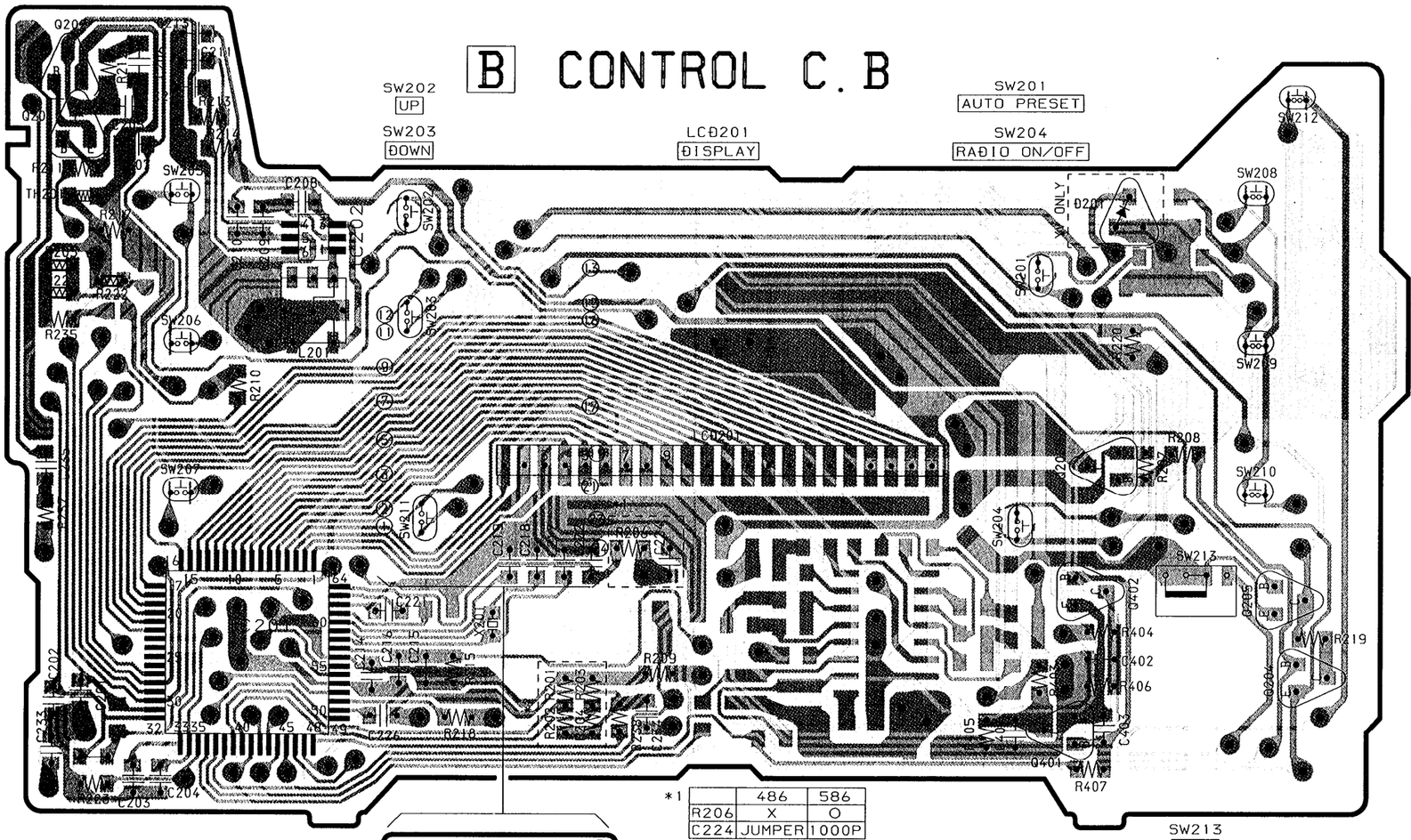
J1
DC 3V

D FLEX C.B (1/2)

SCHEMATIC DIAGRAM – 1 (MAIN)



B CONTROL C.B



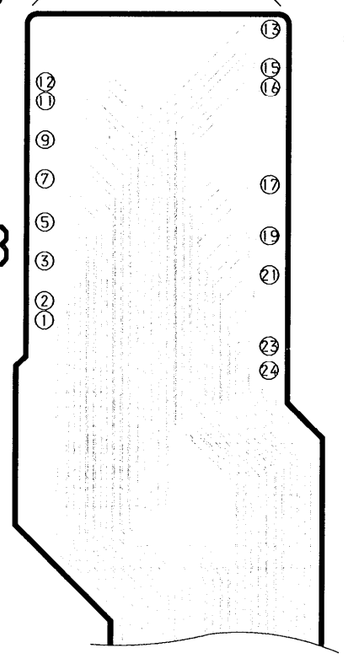
*1

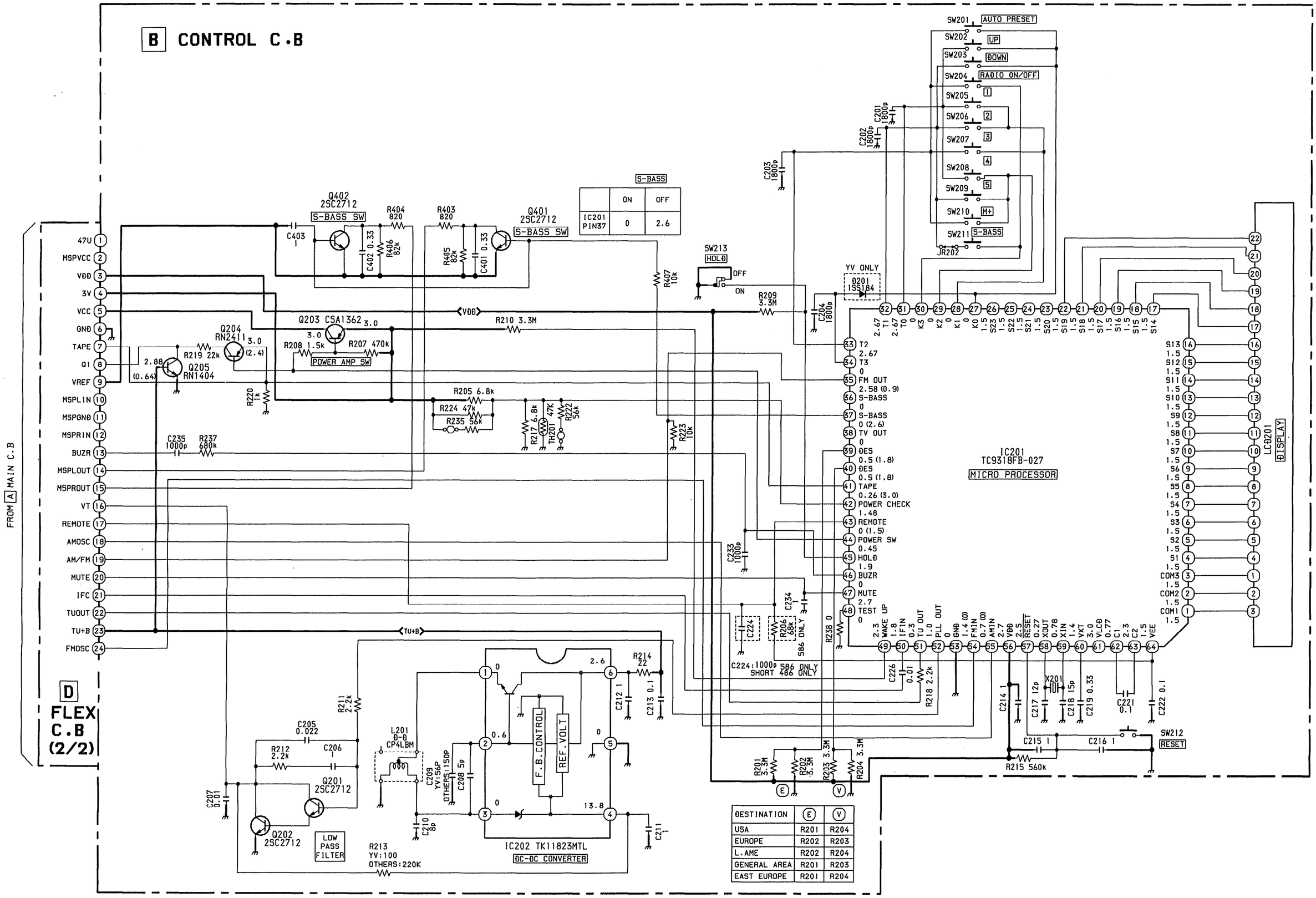
	486	586
R206	X	O
C224	JUMPER	1000P

*2

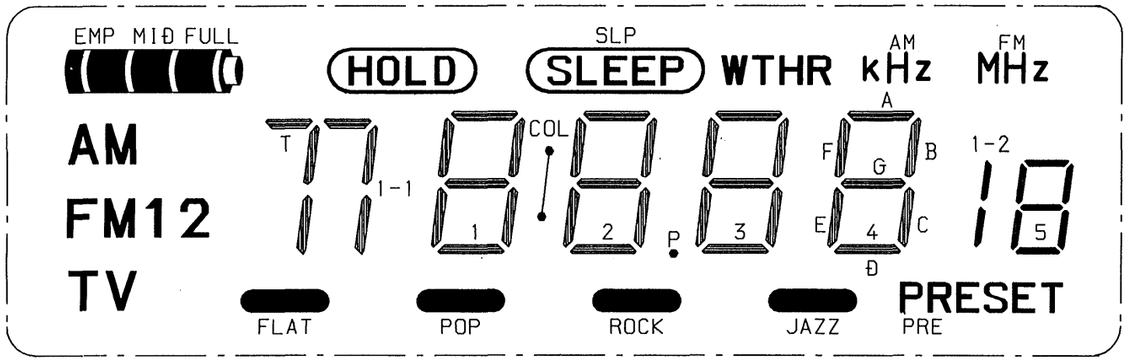
	YU	YL	YV	YH	YJ	YZ	YK
R201	O	X	O	O	O	X	X
R202	X	O	X	X	X	O	O
R203	X	X	X	O	O	O	O
R204	O	O	O	X	X	X	X

D FLEX C.B (2/2)




B CONTROL C.B
FROM A MAIN C.B
47U
MSPVCC
VDD
3V
VCC
GND
TAPE
QI
VREF
MSPLIN
MSPGND
MSPRIN
BUZR
MSPLOUT
MSPROUT
VT
REMOTE
AMOSC
AM/FM
MUTE
IFC
TUOUT
TU+B
FMOSC
Q402 2SC2712
S-BASS SW
Q401 2SC2712
S-BASS SW
S-BASS
ON OFF
IC201 PIN37 0 2.6
SW201 AUTO PRESET
SW202 UP
SW203 DOWN
SW204 RADIO ON/OFF
SW205 1
SW206 2
SW207 3
SW208 4
SW209 5
SW210 M+
SW211 S-BASS
JR202
SW213 HOLD
OFF
ON
YV ONLY
D201 1SS184
Q203 CSA1362
Q204 RN2411
Q205 RN1404
POWER AMP SW
R210 3.3M
R209 3.3M
R407 10k
R205 6.8k
R224 47k
R235 56k
R217 6.8k
TH201 47K
R222 56k
R223 10k
R220 1k
R219 22k
R208 1.5k
R207 470k
C235 1000p
R237 680k
C201 1800p
C202 1800p
C203 1800p
C204 1800p
C233 1000p
C234 1
C224
R206 68k
586 ONLY
R238 0
C224:1000p 586 ONLY
SHORT 486 ONLY
C226 0.01
R218 2.2k
R201 3.3M
R202 3.3M
R203 3.3M
R204 3.3M
R215 560k
C214 1
C215 1
C216 1
C217 12p
X201
C218 15p
C219 0.33
C222 0.1
SW212 RESET
IC201 TC9318FB-027
MICRO PROCESSOR
LCD201 DISPLAY
D FLEX C.B (2/2)
TU+B
R211 2.2k
C205 0.022
R212 2.2k
C206
C207 0.01
Q201 2SC2712
Q202 2SC2712
LOW PASS FILTER
L201 0-0 CP4LBM
C209 YV:56P OTHERS:150P
C208 5p
C210 8p
R213 YV:100 OTHERS:220K
F.B.CONTROL
REF.VOLT
R214 22
C212 1
C213 0.1
C211 1
IC202 TK11823MTL
DC-DC CONVERTER
DESTINATION E V
USA R201 R204
EUROPE R202 R203
L.AME R202 R204
GENERAL AREA R201 R203
EAST EUROPE R201 R204

LCD DISPLAY



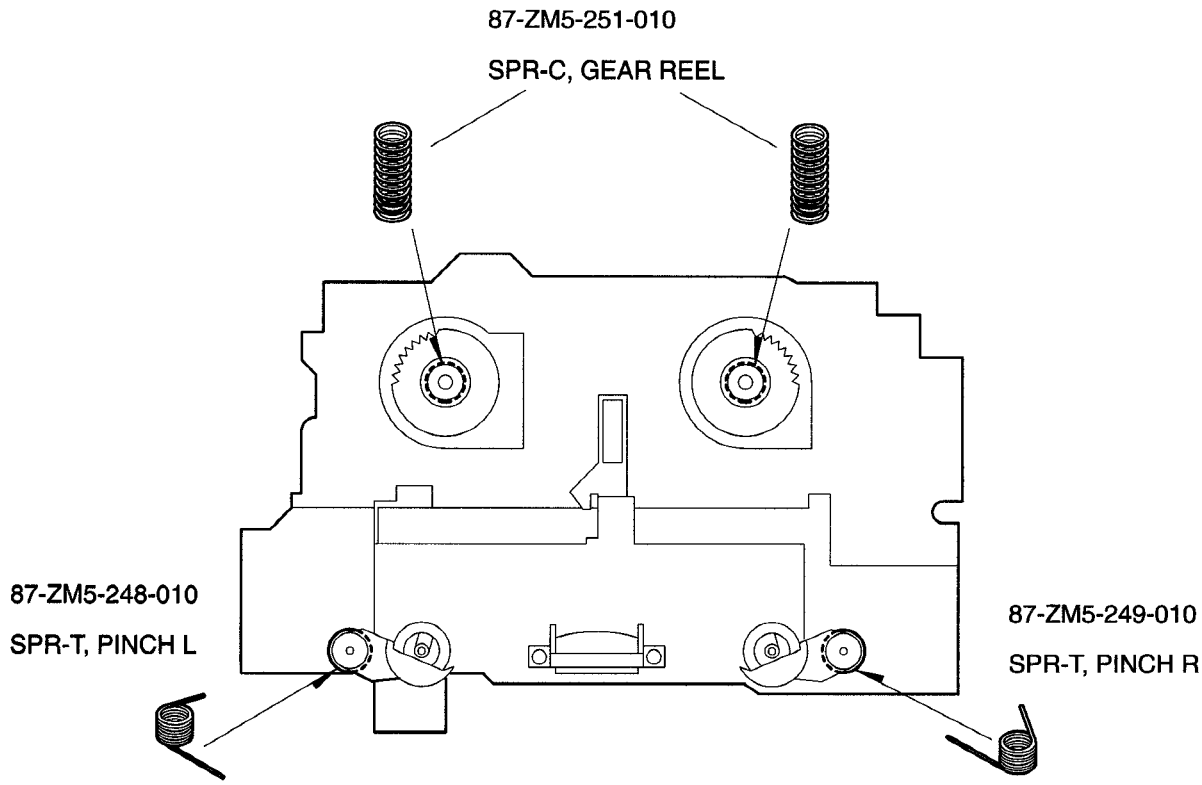
NO	1	2	3	4	5	6	7	8	9	10	11
COM1	-	-	COM1	WTHR	TV	FLAT	1-1	1E	1Ð	POP	COL
COM2	-	COM2	-	FM	2	MIÐ	T	1F	1G	1C	SLP
COM3	COM3	-	-	AM	1	EMP	FULL	HOLÐ	1A	1B	-
NO	12	13	14	15	16	17	18	19	20	21	22
COM1	2E	2Ð	ROCK	P	3Ð	JAZZ	4E	4Ð	PRE	5Ð	5C
COM2	2F	2G	2C	3E	3C	4F	4G	4C	5E	5G	5B
COM3	2A	2B	3F	3G	3B	3A	4A	4B	1-2	5F	5A

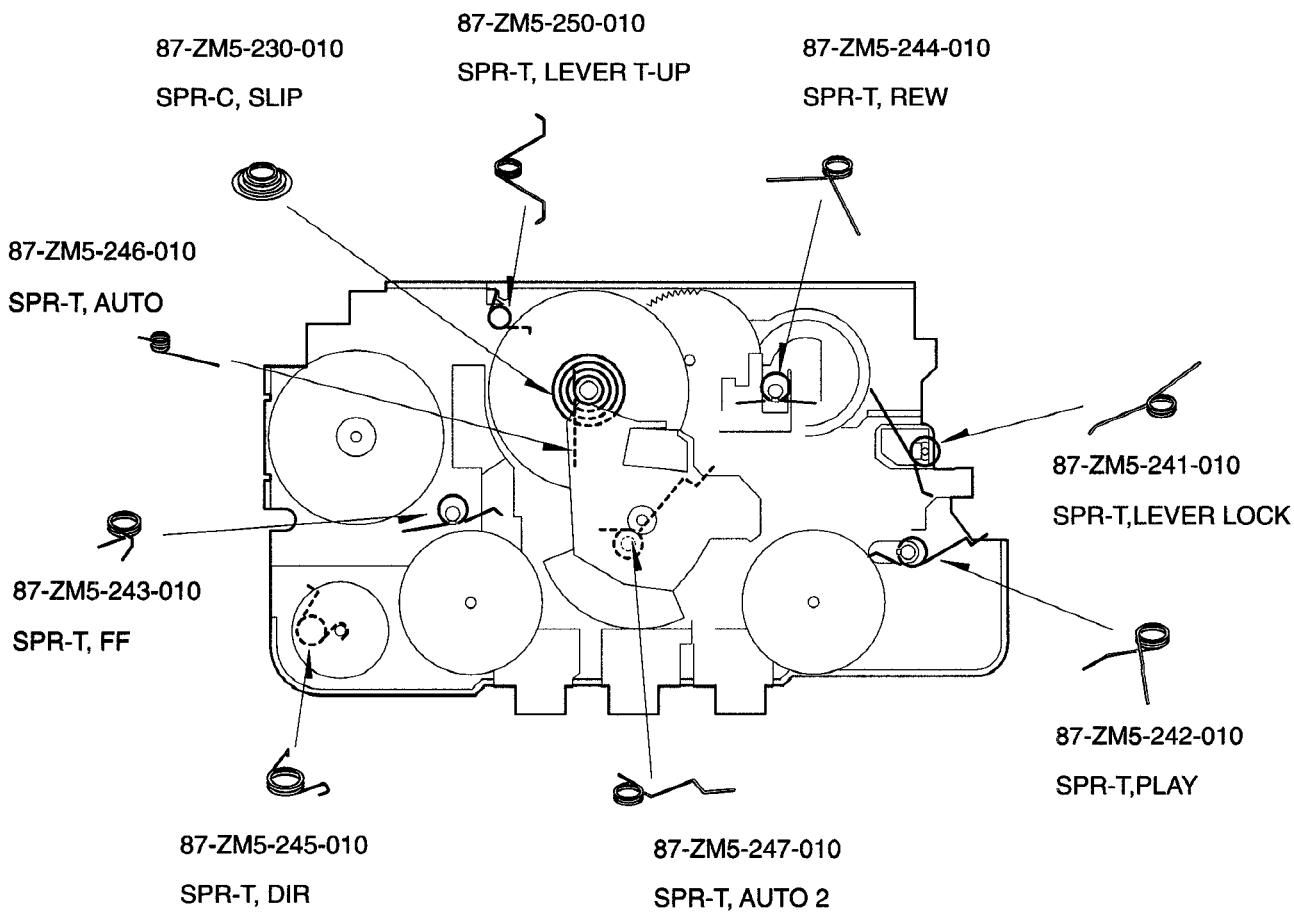
IC DESCRIPTION

IC, TC9318FB-027

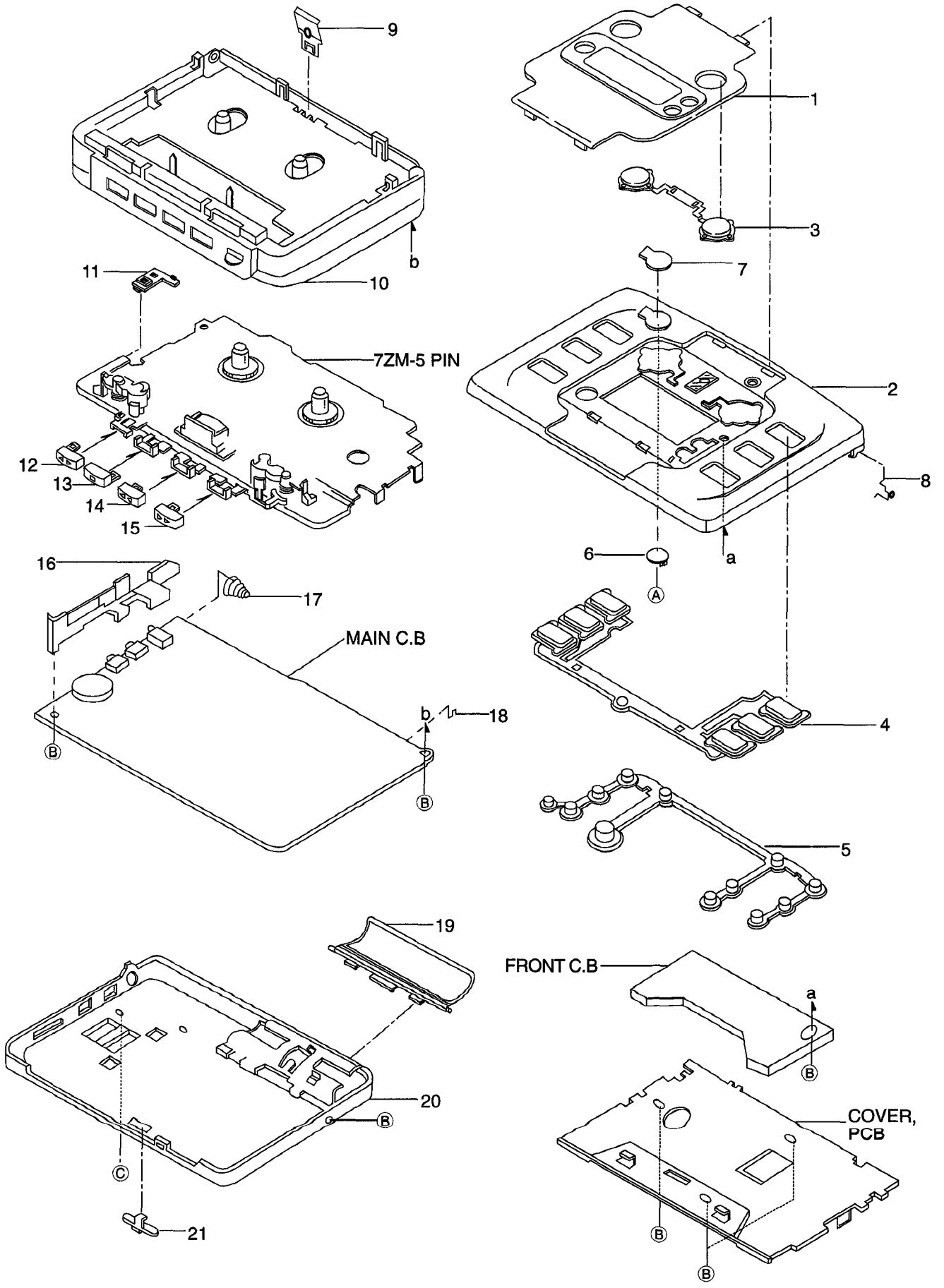
Pin No.	Pin Name	I/O	Description
1 ~ 3	COM1 ~ COM3	O	LCD common output.
4 ~ 22	S1 ~ S19	O	LCD segment output.
23 ~ 26	S20 ~ S23	-	Not used.
27 ~ 30	K0 ~ k3	I	Key matrix input.
31 ~ 34	T0 ~T3	O	H: Key return timing output.
35	FM OUT	O	H: FM/TV/Weather out, L: AM out.
36, 37	S-BASS	O	These two output ports are used for S-BASS switching.
38	TV OUT	O	H: TV/Weather output.
39, 40	DES	I	These two input ports determine the destination.
41	TAPE	I	H: Tape on, L: Tape off.
42	POWER CHECK	I	A/D in for power supply voltage level.
43	REMOTE	I	A/D in for remote controller.
44	POWER SW	O	H: Power off, L:Power on.
45	HOLD	I	H: Hold off, L: Hold on
46	BUZZER	O	Buzzer output.
47	MUTE	O	Mute output.
48	TEST	-	Not used.
49	WAKE UP	I	Wake up the sysem from memory back-up mode.
50	IF IN	I	IF frequence input.
51	TU OUT	O	When tuner on, L level is out.
52	PLL OUT	O	Phase comparison output.
53	GND	-	Ground terminal.
54	FM IN	I	FM oscillator pin.
55	AM IN	I	AM oscillator pin.
56	VDD	I	Supply voltage terminal.
57	$\overline{\text{RESET}}$	I	System reset.
58	XOUT	-	Crystal oscillator pin.
59	XIN	-	Crystal oscillator pin.
60	VXT	-	Power supply for crystal oscillator.
61	VLCD	-	Reference voltage for LCD driver.
62	C 1	-	Voltage doubler boosting.
63	C 2	-	
64	VEE	-	Constant 1.5V for LCD driver.

SPRING APPLICATION POSITION





MECHANICAL EXPLODED VIEW 1 / 1

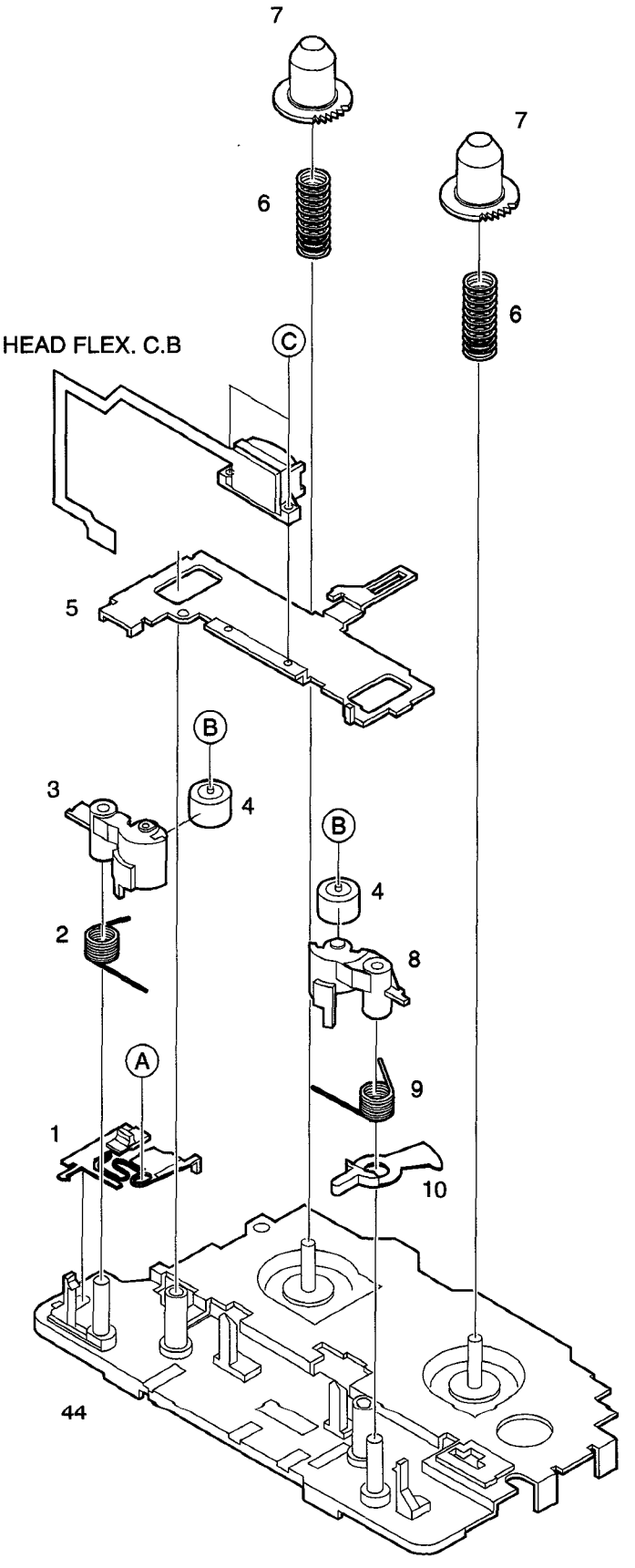


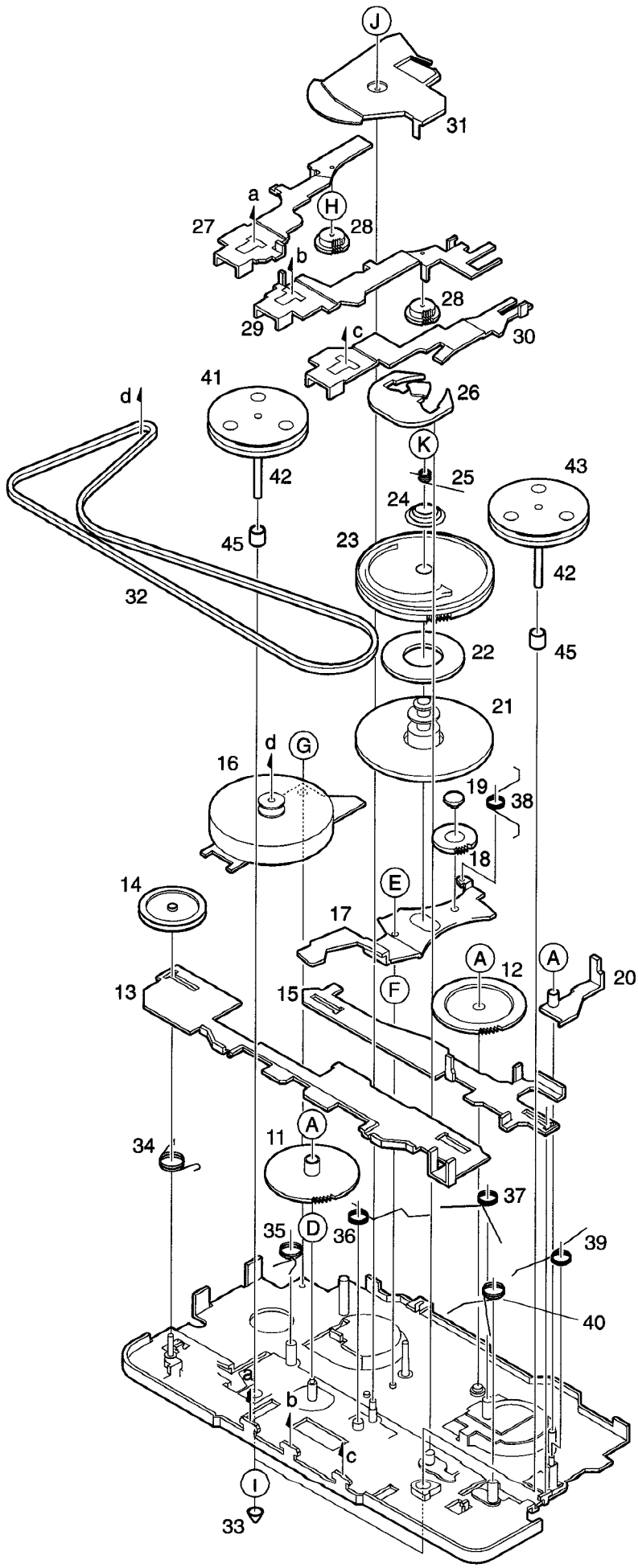
MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	88-HRA-002-010		WINDOW,LCD
2	88-HRA-001-010		LID,CASS<486YU,YV,YL,YH,YL,486YJ>
2	88-HRA-005-010		LID,CASS (EGS)<YK,486YZ>
2	88-HRA-003-010		LID,CASS (RC)<586YU,586YJ>
2	88-HRA-004-010		LID,CASS (RC, EGS)<586YZ>
3	88-HR9-005-010		CAP, PRESET
4	88-HR9-004-010		CAP, FUNCTION
5	88-HR9-006-010		BTN,FUNCTION
6	88-HR9-202-010		JOINT,HOLD
7	88-HR9-003-010		KNOB,RTRY HOLD
8	87-HRA-204-010		SPR-T,CLICK
9	87-HG6-204-010		SPR-P,CASS
10	88-HRA-006-010		FRAME,CENTER
11	88-HR9-007-010		LEVER,REV MODE
12	87-HRB-019-010		BTN,PLAY (GRAY)
13	87-HRB-020-010		BTN,STOP (GRAY)
14	87-HRB-026-010		BTN,REW (GRAY)
15	87-HRB-027-010		BTN,FF (GRAY)
16	87-HRA-201-110		HLDR,BAR ANT
17	87-HRA-203-110		BAT-CONTACT,-
18	88-HR9-206-010		BAT-CONTACT,+
19	88-HR9-017-010		LID,BATT
20	88-HRA-007-010		CABI,REAR<486YU,YL,YH,YL>
20	88-HRA-008-010		CABI,REAR (CE)<YK,486YZ>
20	88-HRA-010-010		CABI,REAR (RC)<586YU>
20	88-HRA-011-010		CABI,REAR (RC, CE)<586YZ>
20	88-HRA-013-010		CABI,REAR (RC, YJ)<586YJ>
20	88-HRA-009-010		CABI,REAR (YJ)<486YJ>
20	88-HRA-012-010		CABI,REAR (YV)<YV>
21	87-HRF-019-010		KNOB,SL GRAY<586YZ,YK,486YZ>
A	87-067-527-010		SCREW,VT+1.4-2.5(B)
B	87-067-384-010		SCREWVT1.4-3.5HL
C	87-067-770-010		VT2+1.7-9(3) BLK

TAPE MECHANISM EXPLODED VIEW 1 / 1




J
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D
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33

TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-ZM5-218-010		LEVER,MOD SEL 2
2	87-ZM5-248-010		SPR-T,PINCH L
3	87-ZM5-232-010		ARM,PINCH L
4	87-ZM5-255-010		ROLLER ASSY,PINCH
5	87-ZM5-210-010		LEVER,PLAY
6	87-ZM5-251-010		SPR-C,GEAR REEL
7	87-ZM5-276-010		GEAR,REEL L
8	87-ZM5-233-010		ARM,PINCH R
9	87-ZM5-249-010		SPR-T,PINCH R
10	87-ZM5-219-010		BTN,DIR KNOB
11	87-ZM5-221-010		GEAR,IDL A
12	87-ZM5-222-010		GEAR,IDL B
13	87-ZM5-212-010		LEVER,DIR P
14	85-ZM1-212-010		PULLY PM 2
15	87-ZM5-213-010		LEVER,LOCK
16	M8-6ZS-390-000		ABL-63A
17	87-ZM5-208-010		LEVER ASSY,T-UP
18	87-ZM5-223-010		GEAR,PLAY
19	87-ZM5-259-010		CAP,PLAY
20	87-ZM5-216-010		LEVER,PLAY SW
21	87-ZM5-228-010		GEAR,SLIP B
22	87-ZM5-229-010		FELT,CLUTCH
23	87-ZM5-227-010		GEAR,SLIP A
24	87-ZM5-230-010		SPR-C,SLIP
25	87-ZM5-246-010		SPR-T,AUTO
26	87-ZM5-214-010		LEVER,AUTO
27	87-ZM5-204-010		LEVER ASSY,FF
28	87-ZM5-225-010		GEAR,FF/REW
29	87-ZM5-206-010		LEVER ASSY,REW
30	87-ZM5-211-010		LEVER,STOP
31	87-ZM5-261-010		LEVER,AUTO 2S
32	87-ZM5-253-010		BELT,MAIN
33	87-ZM5-258-010		CAP,CAPSTAN
34	87-ZM5-245-010		SPR-T,DIR
35	87-ZM5-243-010		SPR-T,FF
36	87-ZM5-247-010		SPR-T,AUTO 2
37	87-ZM5-244-010		SPR-T,REW
38	87-ZM5-250-010		SPR-T,LEVER T-UP
39	87-ZM5-241-010		SPR-T,LEVER LOCK
40	87-ZM5-242-010		SPR-T,PLAY
41	87-ZM5-236-010		FLY-WHL,R
42	87-ZM5-237-010		CAPSTAN, 1.8-20.2
43	87-ZM5-235-010		FLY-WHL,L
44	87-ZM5-201-010		CHAS ASSY,OUT-SERT P
45	87-ZM5-260-010		CLR,BEARING
A	87-067-860-010		W-P,0.95-3-0.4
B	87-B10-085-010		W-L,1.31-3-0.2
C	87-ZM5-270-010		S-SCREW,1.4-5-STP
D	87-B10-084-010		W-L,2.2-3.2-0.1
E	87-B10-080-010		W-L,0.97-3-0.35
F	87-B10-086-010		W-L,1.57-2.8-0.1
G	87-ZM5-271-010		S-SCREW,1.4-2.6-STP
H	87-B10-087-010		W-L,1.25-2.26-0.1 SLT
I	87-B10-070-010		W-P,1.55-2.9-0.25 SLIT
J	87-ZM5-083-010		W-L,0.95-2.5-0.3
K	87-B10-083-010		W-L,0.95-2.5-0.3

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-HRA-901-010		IB,YU (ESF)-RC<586YU>
1	88-HRA-902-010		IB,YU (ESF)<486YU>
1	88-HRA-907-010		IB,YJ (ESC)-RC<586YJ>
1	88-HRA-908-010		IB,YJ (ESC)<YJ>
1	88-HRA-909-010		IB,YV (ERPO)<YV>
1	88-HRA-911-010		IB,YL (ESP)<YL>
1	88-HRA-903-010		IB,Y (ESF)-RC<586YZ>
1	88-HRA-904-010		IB,Y (GID)-RC<586YZ>
1	88-HRA-905-010		IB,Y (ESF)<486YZ>
1	88-HRA-906-010		IB,Y (GID)<486YZ>
1	88-HRA-912-010		IB,Y(POHCZ)-RC<586YZ>
1	88-HRA-913-010		IB,Y(POHCZ)<486YZ>
2	84-447-019-310		CLIP,BELT
3	87-B30-081-010		HEADPHONE,HP-M009(S)<486YU,486YL>
3	87-B30-082-010		HEADPHONE,HP-MR010(F)<586YU>
3	87-B30-092-010		HEADPHONE,HP-MR015(F)<586YZ1,586YJ1>
3	87-B30-149-010		HEADPHONE,HP-M007(FL)<EXCEPT YU,786YZ1,586YJ1>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G— —	
G— —	
G— —	

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